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areaDetector: New Features for Release 1–6

Mark Rivers

Center for Advanced Radiation Sources, University of Chicago, Chicago, IL 60637

areaDetector Release 1–6 provides many enhancements to the plugins available in the EPICS areaDetector module, including:

NDPluginStats plugin. This new plugin calculates statistics on an array, including basic statistics, centroid position, and width. It also computes X and Y profiles including average profiles, profiles at the centroid position, and profiles at a user-defined cursor position.

NDPluginProcess plugin. This new plugin does arithmetic processing on arrays, background subtraction, flat field normalization, offset and scale, low and high clipping, recursive filtering in the time domain, and conversion to a different output data type.

NDPluginOverlay plugin. This new plugin adds graphic overlays to an image. It replaces the “Highlight ROIs” function that was previously provided in the ROI plugin. However, it is much more general and can be used to display not only ROIs but multiple cursors, user-defined boxes, etc.

NDPluginROI. The new version is much simpler with many functions moved to new plugins. One new function has been added—the ability to divide the array by a scale factor, which is useful for avoiding overflow when binning or converting data types.

NDPluginColorConvert. Added conversions from mono to RGB1, RGB2, and RGB3, and from RGB1, RGB2, and RGB3 to mono.